





EPCOR Operations



Public Private Partnership

Partnership between government agency and private sector company to deliver an infrastructure project.



- + Risk-sharing
 - + Speed
 - + Cost
- + Maintenance



- Project not delivered on time
 - Exceeds cost estimates
- Technical defects



Alternative Project Delivery

What is APD?

- Life cycle delivery of infrastructure
- Single point of Design-Build-O&M responsibility
- Risk transfer: cost, schedule, and performance

Owner Motivations

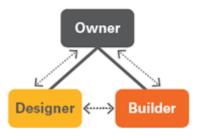
- Risk transfer and/ or sharing
- Life-cycle cost certainty
- Fast track Project completion
- Efficient financial close

Private Value

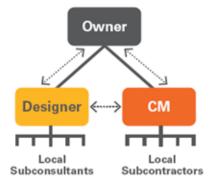
- Long term utility operator perspective
- Project execution, financing, & compliance
- Track record of delivery and performance

APD Delivery Options

Design-Bid-Build (DBB)



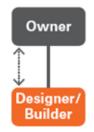
Construction Management at Risk (CM@Risk)



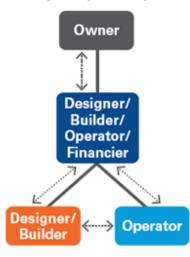
"Progressive" Design-Build Guaranteed Maximum Price (GMP)



Lump Sum Design-Build (LS)



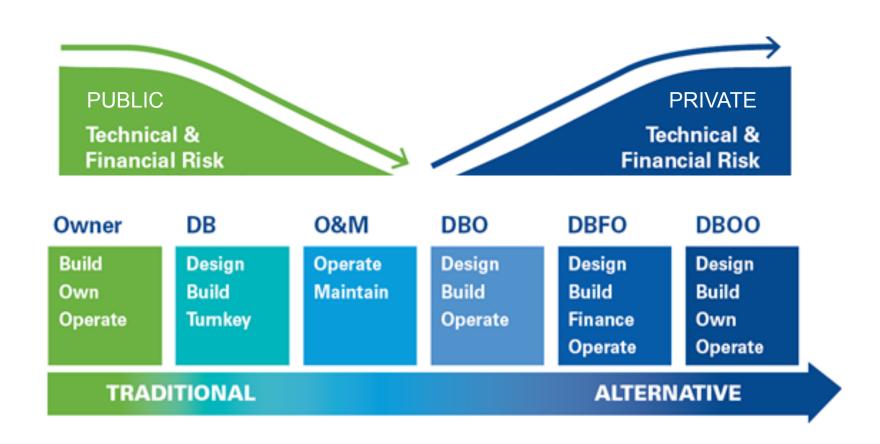
Design-Build-Operate/Finance (DBO, DBFO)



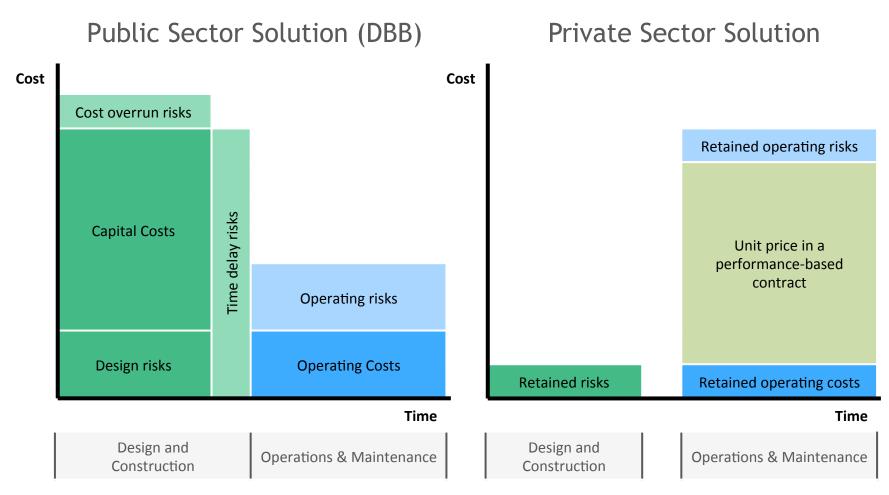
Traditional Delivery

Alternative Delivery

Risk Transfer in APD



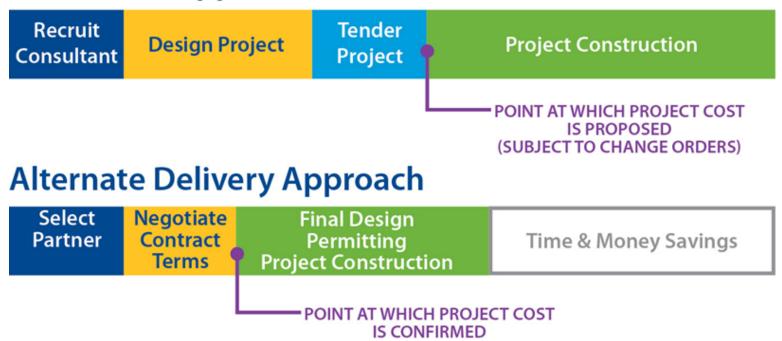
P3 Risk Allocation



Source: from Deloitte

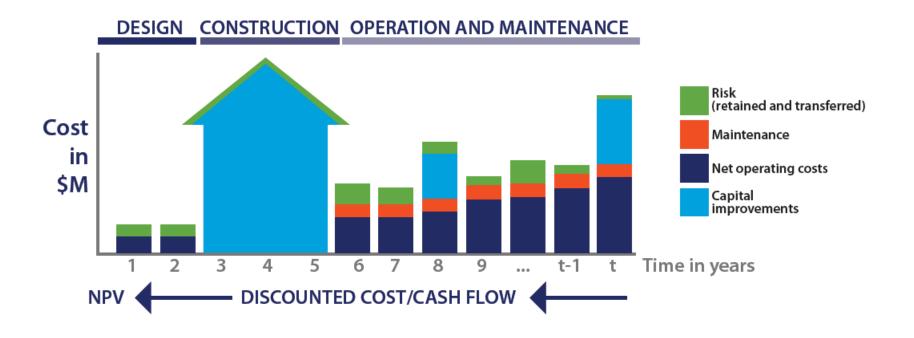
Value of Schedule Flexibility

Traditional Approach



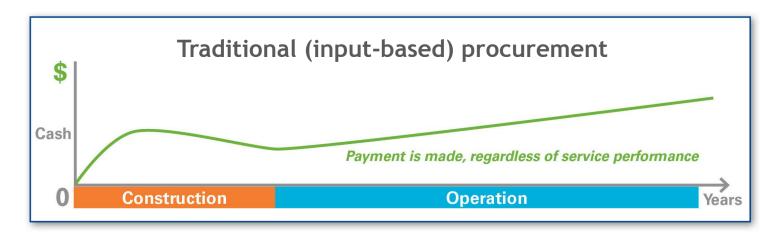
APD enables detail design and construction to happen concurrently and does not have to await financing to be in place.

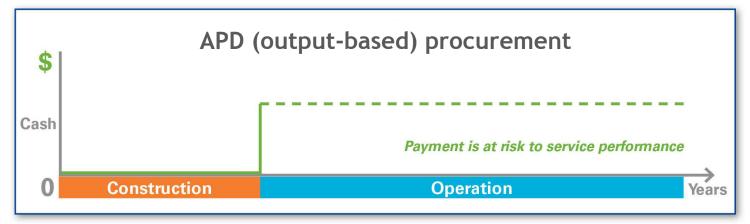
Actual Costs over the Life Cycle



- Over the life cycle the project capital construction costs are only a percentage of the overall cost impact of new infrastructure typically, capital only makes up 30% to 50% of project costs; the rest are related to financing and O&M costs
- Most projects never get priced for the entire life of the project

Procurement Implications





EPCOR Experience

Project	Year	Public Sector Proposed Cost	Private Sector Alternate Delivery Costs	Savings in Percent
City of Regina WWTP	2014	\$225 M	\$181 M	20%
Kananaskis WWTP	2012	\$62 M	\$59.6 M	4%
Town of Taber WWTP	2009	\$28 M	\$18.5 M	34%
Town of Okotoks WWTP	2007	\$24 M	\$11 M	54%
District of Sooke WW System	2006	\$27 M	\$17 M	37%
Britannia Mine WTP	2005	\$35 M	\$25 M	29%
District of Port Hardy WTP	2000	\$7 M	\$4 M	43%

QUESTIONS?

